AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. **(currently amended)** A Wavelength Division Multiplexing (WDM) system for demultiplexing mixed optical signals , said system comprising:

a receiving optical fiber having an input end for receiving the mixed optical signals and an output end;

a filter arranged downstream of the output end of the receiving optical fiber for receiving the mixed optical signals from said output end and selectively transmitting a specific wavelength optical signal of a specific wavelength and reflecting optical signals of other wavelengths;

a lens positioned downstream of said filter and spaced from said filter by a gap;

a transmitting optical fiber positioned downstream of said lens for outputting the specific wavelength optical signal transmitted through the filter and said lens;

a shutter member moveable into and out of said gap and across a propagation path of the specific wavelength optical signal in said gap for attenuating the specific wavelength optical signal transmitted between the filter and the lens;

an actuator for driving the shutter member to move into and out of said gap and across [[a]] the propagation path of the specific wavelength optical signal in said gap; and

a control unit for controlling the actuator.

2. (original) The WDM system according to claim 1, wherein the filter is a dielectric thin film filter.

3-4. (canceled)

5. (previously presented)The WDM system according to claim 1, wherein the actuator is selected from the group consisting of a comb drive type Micro Electro-Mechanical System (MEMS) actuator and a scratch drive type MEMS actuator.

6. (canceled)

7. (previously presented)The WDM system according to claim 1, wherein the actuator is provided integrally in a main board supporting the receiving and transmitting optical fibers.

8. (previously presented)The WDM system according to claim 1, further comprising a photodetector connected with the control unit for measuring the intensity of the specific wavelength optical signal attenuated by the shutter member and sending the measured intensity to the control unit.

9. (original) A Wavelength Division Multiplexing (WDM) system for demultiplexing mixed optical signals transmitted through one channel from the outside to distribute specific wavelength optical signals into a plurality of channels, comprising:

a dual collimator having a receiving optical fiber for receiving the mixed optical signals;

a filter arranged in an output end of the receiving optical fiber to selectively transmit a specific wavelength optical signal of a wavelength identical with the peak wavelength thereof but reflect remaining wavelength optical signals;

a single collimator having a transmitting optical fiber for outputting the specific wavelength optical signal transmitted through the filter;

a shutter member arranged between the filter and the single collimator to attenuate the specific wavelength optical signal transmitted through the filter;

an Micro Electro-Mechanical System (MEMS) actuator for driving the shutter member across the propagation of the specific wavelength optical signal transmitted through the filter; and

a control unit for controlling the actuation of the actuator.

10. (previously presented)The WDM system according to claim 9, wherein

the dual collimator includes a dual collimator pig tail for fixing the receiving optical fiber, a dual collimator GRIN lens attached to the dual collimator pig tail via a transparent adhesive member, and a dual collimator glass member receiving therein the dual collimator pig tail, and

the single collimator includes a single collimator pig tail for fixing the transmitting optical fiber, a single collimator GRIN lens attached to the single collimator pig tail via a transparent adhesive member, and a single collimator glass member receiving therein the single collimator pig tail.

11. (previously presented)The WDM system according to claim 9, wherein the shutter member is moveable into and out of an air gap between a single GRIN lens of the single collimator and the filter, said air gap being formed in an adhesive member which coaxially couples the single GRIN lens of the single collimator with the filter.

12. (canceled)

13. (previously presented)The WDM system according to claim 9, further comprising:

a fixing tube having opposite ends and a middle region between said opposite ends, said filter being housed in the middle region of said fixing tube; and

a dual collimator glass member and a single collimator glass member, which receive therein said dual collimator and said single collimator, respectively, and are mounted at the opposite ends of said fixing tube to form an air gap between the filter and the single collimator ;

wherein said shutter member is moveable into and out of said air gap for attenuating the specific wavelength optical signal transmitted through the air gap .

14. (previously presented)The WDM system according to claim 13, wherein the fixing tube has vent holes adjacent the opposite ends thereof .

15. (previously presented)The WDM system according to claim 13, wherein the fixing tube has an opening located corresponding to the air gap and the shutter member is moveable through the opening into said air gap.

16. (previously presented)The WDM system according to claim 1, wherein a space between said lens and said filter includes

a filled region filled with adhesive material which defines an adhesive member and couples the lens to the filter; and

a unfilled region free of said adhesive material and defining said gap.

17. (previously presented)The WDM system according to claim 16, wherein said adhesive member is of a U shape having a central slot in which said shutter member is receivable.

18. (previously presented)The WDM system according to claim 1, further comprising a fixing tube having axially opposite ends and a middle region between said opposite ends;

said filter and lens being housed in the middle region of said fixing tube;

the output end of the receiving optical fiber and an input end of the transmitting optical fiber being housed at the ends of said fixing tube, respectively;

wherein

the fixing tube has an opening through a circumferential wall thereof, said opening being located corresponding to the gap; and

the shutter member is moveable through the opening into said gap.

19. (previously presented)A Wavelength Division Multiplexing (WDM) system for demultiplexing mixed optical signals, said system comprising:

a receiving optical fiber having an input end for receiving the mixed optical signals and an output end;

a filter arranged downstream of the output end of the receiving optical fiber for receiving the mixed optical signals from said output end and selectively transmitting a specific wavelength optical signal of a specific wavelength and reflecting optical signals of other wavelengths;

a lens positioned downstream of said filter;

a transmitting optical fiber having an input end, which is positioned downstream of said lens and spaced from said lens by a gap, and an output end for outputting the specific wavelength optical signal transmitted through the filter and said lens to the input end of said transmitting optical fiber;

a shutter member moveable into and out of said gap for attenuating the specific wavelength optical signal transmitted between the lens and the input end of said transmitting optical fiber;

an actuator for driving the shutter member to move into and out of said gap and across a propagation path of the specific wavelength optical signal in said gap; and

a control unit for controlling the actuator.

20. (previously presented)The WDM system according to claim 19, wherein a space between said lens and the input end of said transmitting optical fiber includes

a filled region filled with adhesive material which defines an adhesive member and couples the lens to the input end of said transmitting optical fiber; and

a unfilled region free of said adhesive material and defining said gap.

21. (previously presented)The WDM system according to claim 19, further comprising a pigtail for fixing the input end of said transmitting optical fiber adjacent said lens;

said pigtail and said lens having facing surfaces which define the gap therebetween and are inclined relative to the propagation path of the specific wavelength optical signal in said gap; and

said shutter method being moveable between said inclined surfaces.

22. (previously presented)The WDM system according to claim 21, wherein the filter is a dielectric thin film filter.

23. (previously presented)The WDM system according to claim 21, wherein the actuator is selected from the group consisting of a comb drive type Micro Electro-Mechanical System (MEMS) actuator and a scratch drive type MEMS actuator.

24. (previously presented)The WDM system according to claim 21, further comprising a photodetector positioned downstream of the output end of said transmitting optical fiber and connected with the control unit for measuring the intensity of the specific wavelength optical signal attenuated by the shutter member and sending the measured intensity to the control unit.